

REMARKS

A total of 15 claims remain in the present application. As a result of foregoing amendments, original claims 13-15 have been cancelled in favour of new claims 13-15 which more distinctly define features of the present invention. In particular, new claim 13 defines that the GPU is "adapted to determine whether to each data point is visible with respect to a fixed point in front of the two dimensional display, and replace the respective color value with digital information indicative of the determination result". New claims 14 and 15 depend from new claim 13 and are similar to original claims 2 and 4, respectively. No revisions have been effected in claims 1-12.

Support for new claims 13-15 is clearly found in the original claims 1-4, and the originally filed specification. As such, it is believed that no new subject matter has been introduced, and that cancellation of original claims 13-15 in favour of new claims 13-15 does not go beyond the originally claimed invention.

Turning now to the text of the Written Opinion:

- claims 1-12 are considered to meet the requirements of paragraphs 1-4 of Article 33 PCT;
- claims 13-15 stand rejected under Articles 33(1) and 33(2) PCT

As an initial matter, Applicant appreciates the Examiner's indication of allowable subject matter in claims 1-12. The Examiner's objections with respect to claims 13-15, are believed to be addressed by the above-noted amendments, and further in view of the following remarks.

New claim 13 defines that the GPU is "adapted to determine whether each data point is visible with respect to a fixed point in front of the two dimensional display, and replace the respective color value with digital information indicative of the determination result". As stated by the Examiner at paragraph 2.3 of the Written Opinion, neither of documents D1 and D2 teaches or fairly suggests this feature. None of the other known prior art references provides the missing teaching. As such, new claim 13 is believed to meet the requirements of paragraphs 1-4 of Article 33 PCT.

New claims 14 and 15 depend from claim 13 and thus are believed to meet the requirements of paragraphs 1-4 of Article 33 PCT. Additionally, these claims define further

features of the present invention, and thus are believed to provide further grounds of patentability.

In light of the forgoing, this application is now believed to be in a condition for acceptance and notice to that effect is respectfully requested.

Respectfully,

A handwritten signature in dark ink, appearing to read "K. Daniels". The signature is written in a cursive, slightly slanted style.

Kent Daniels
OGILVY RENAULT

Enc.: Marked-up claim pages
Clean version claim page.

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12. A method as claimed in claim 10 wherein the step of displaying comprises displaying the CLP over an underlying two dimensional graphical display to provide increased intensity to the display at the coordinates corresponding to the CLP.
- ~~13. A graphical processing unit (GPU) adapted to accept a series of three dimensional data points each containing a color value and map them to a two dimensional display space,~~
- ~~wherein the color values of the data points provided to the GPU may be replaced by digital information,~~
- ~~whereby the mapped two dimensional data points may be stored according to the digital information provided in the data point.~~
- ~~14. A data point comprising a coordinate portion and a color portion for processing by a graphical processing unit,~~
- ~~wherein the color portion stores digital information so that the processed data point may be stored in a data store according to the digital information provided in the color portion.~~
- ~~15. A data point as claimed in claim 14, wherein the information identifies the data point.~~
13. A graphical processing unit (GPU) adapted to map three-dimensional data points to a two-dimensional

display space, each data point containing a
respective color value,

wherein the GPU is further adapted to determine
whether each data point is visible with respect
to a fixed point in front of the two
dimensional display, and replace the respective
color value with digital information indicative
of the determination result,

whereby the mapped data points may be stored
according to the digital information.

14. A graphical processing unit (GPU) as claimed in
claim 13, wherein the GPU comprises a commercially
available unit adapted to perform three-dimensional
raster image processing.

15. A graphical processing unit (GPU) as claimed in
claim 13, wherein the GPU is adapted to operate in
a first mode in which the digital information
indicates when the respective data point is visible
with respect to the fixed point and a second mode
in which the digital information indicates when the
respective data point is not visible with respect
to the fixed point.